

BDCP Effects Analysis Science Review

Panel Members

Nancy Monsen – Delta Hydrodynamics, Stanford University

Dr. Monsen's research has focused on multi-dimensional hydrodynamic modeling of the Sacramento-San Joaquin Delta for the last sixteen years. Her Ph.D. research was based on the TRIM3D hydrodynamic model. She also has consulting experience with the DELFT3d hydrodynamic model. She is a Research Associate in the Environmental Fluid Mechanics Laboratory, part of the Civil and Environmental Engineering Department, at Stanford University. Prior to working at Stanford, she worked for ESA PWA (formerly Philip Williams and Associates) for a year and a half and at the U.S. Geological Survey (Menlo Park, National Research Program) for ten years. Dr. Monsen earned her doctorate in Civil and Environmental Engineering at Stanford University.

Greg Ruggerone – Anadromous Fish

Dr. Ruggerone is senior scientist for anadromous fisheries studies and brings 20 years of experience in anadromous fisheries ecology and management to Natural Resources Consultants (NRC). He has conducted applied research in salmonid predator-prey interactions, effects of habitat changes on salmonid production, limnological studies, salmon stock identification techniques, effects of hydropower operations on downstream smolt and upstream adult migrations, forecasting salmon run sizes, and investigations of oil spill effects on anadromous fish populations. Prior to joining NRC, Dr. Ruggerone was a principal research scientist with the Fisheries Research Institute at the University of Washington where he participated in extensive field studies in applied fisheries biology and management in Alaska and the Columbia River. Dr. Ruggerone received a Ph.D. in Fisheries from University of Washington in 1989. (http://www.nrccorp.com/staff/staff_ruggerone.htm).

Si Simenstad – Pelagic/Native Fish

As a Research Professor at the School of Aquatic and Fishery Sciences, University of Washington, Prof. Charles ("Si") Simenstad investigates shallow-water community and food web structure, and restoration ecology, of estuarine and coastal marine ecosystems along the Pacific Northwest coast, from San Francisco Bay, the Oregon and Washington coasts, Puget Sound, and Alaska. Ecosystems that have especially attracted his interest include: coastal marshes, mudflats and eelgrass of Pacific Northwest estuaries; nearshore, kelp-dominated shores of the Aleutian Islands, Alaska, and Puget Sound, Washington; and the complex estuarine wetlands of San Francisco Bay-Delta. Much of his recent research is involved in the Columbia River estuary, where he is particularly intrigued by ecological processes associated with estuarine turbidity maxima and the importance of brackish marshes and forested wetlands to the resilience of juvenile Pacific salmon. Much of this research has focused on the role of ecosystem structure and change, and the associated ecological (e.g., food web) interactions that are regulated by strong ecological interactions (e.g., keystone species such as sea otters), natural disturbance, or sensitivity to anthropogenic effects, such as wetland alteration. Si has also become increasingly interested in large-scale interactions across landscapes that alter fundamental ecosystem structure and processes at local scales, such as river flow diversion and regulation influences on estuarine communities and food webs, and the strategic planning of ecosystem restoration and preservation at different scales. (<http://fish.washington.edu/people/simenstd/>).

John Skalski – Fishery population dynamics and modeling

Dr. Skalski is a Professor of Biological Statistics in the School of Aquatic & Fishery Sciences, College of the Environment, at the University of Washington. He is also an adjunct professor in Quantitative Ecology and Resource Management and Wildlife Sciences, and an instructor in the Center for Quantitative Sciences. His expertise is in sampling theory, parameter estimation, mark-recapture theory, and population dynamics. His research focuses on the development of sampling methodology, field designs, and statistical tests for human-induced and natural effects on organismic and ecological systems. He is the statistician in charge of survival compliance testing at all 13 major hydroprojects in the Snake-Columbia River system. He has authored or coauthored over 100 technical reports on salmonid survival studies and over 40 peer-reviewed articles on tagging studies. Dr. Skalski is a member of the American Statistical Association, The Wildlife Society, and the American Fisheries Society. He is also a Certified Wildlife Biologist through The Wildlife Society.

Alex Parker – Aquatic Ecology/Food Webs

Alex Parker is a research scientist at the Romberg Tiburon Center, and an adjunct professor in Biology at San Francisco State University and Santa Clara University. His Ph.D. work (College of Marine Studies, University of Delaware) on microbial biogeochemistry in the Delaware Estuary, contributed to a 30-plus year dataset on nutrients and phytoplankton. He has also done additional research in polar ecosystems and equatorial Pacific.

Tom Parker, Plant Communities

Thomas Parker is Professor of Ecology and Evolution at San Francisco State University who studies the ecology and evolution of plant communities, focusing on their dynamics. His current research includes the effects of climate change on tidal wetlands of the San Francisco Bay-Delta, and the ecology and evolution of *Arctostaphylos* species in chaparral and other communities.

(<http://bio.sfsu.edu/people/v-thomas>).

T. Luke George, Terrestrial Ecology

Dr. George has been a faculty member in the Department of Wildlife at Humboldt State University since 1991. He specializes in the design, implementation, and analysis of demographic, population monitoring, and habitat selection studies of terrestrial vertebrates. His recent work has focused on estimating demographic parameters and modeling habitat selection of threatened and at risk species including the San Clemente sage sparrow, northern spotted owl, greater sage grouse, and tricolored blackbird. Dr. George assisted with the development of a population viability analysis (PVA) of the San Clemente sage sparrow and has served as an advisor on PVAs of Western snowy plovers and San Clemente loggerhead shrikes. He has conducted research on habitat selection and space use of Steller's jays and common ravens in Redwood National and State Parks and has advised state and federal agencies on strategies to reduce nest predation by corvids on marbled murrelets, Western snowy plovers, and other threatened and endangered species in California.